

TP-01058

TP-01058

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Job No. CM-7823 Map No. TP-01058

Classification No. III Edition No. 1

This map will not be field edited

LOCALITY

State California

General Locality Suisun Bay

Locality Ryer Island to Browns Island

1979 TO 19

REGISTRY IN ARCHIVES

DATE

*copies of 76-40's
sent to CG Hydr
and 12th CG Dist
(Chief Frias)
8-30-82
KOS*

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP. 01058	
DESCRIPTIVE REPORT - DATA RECORD				☒ ORIGINAL		MAP EDITION NO. (7)	
				☐ RESURVEY		MAP CLASS III	
				☐ REVISED		JOB PH. CM-7823	
PHOTOGRAMMETRIC OFFICE				LAST PRECEDING MAP EDITION			
Photogrammetry Division (Rockville)				TYPE OF SURVEY		JOB PH. _____	
OFFICER-IN-CHARGE				☐ ORIGINAL		MAP CLASS _____	
Walter S. Simmons				☐ RESURVEY		SURVEY DATES:	
				☐ REVISED		19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
AEROTRIANGULATION - Job CM-7823, Part I - 3/28/80 OFFICE - Job CM-7823, 7/7/80				FIELD - Job CM-7823, Sacramento and San Joaquin Rivers, California - 2/6/79			
II. DATUMS							
1. HORIZONTAL: ☒ 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: ☒ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☒ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL				OTHER (Specify) National Geodetic Vertical Datum 1929			
3. MAP PROJECTION				4. GRID(S)			
Lambert Conformal Conic				STATE California		ZONE II	
5. SCALE 1:20,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				B. Thornton		May 5, 80	
METHOD: Analytic (Block) LANDMARKS AND AIDS BY				" "		May 5, 80	
2. CONTROL AND BRIDGE POINTS PLOTTED BY				Rodney Cauthorne		May 30, 80	
METHOD: Calcomp Plotter CHECKED BY				N/A			
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				B. Baldwin		July 11, 80	
COMPILATION CHECKED BY				Wm. Maynard		July 15, 80	
INSTRUMENT: Wild B-8/CAPS				CONTOURS BY		N/A	
SCALE: 1:20,000 CHECKED BY				N/A			
4. MANUSCRIPT DELINEATION PLANIMETRY BY				Wm. Maynard		Aug. 11, 80	
CHECKED BY				B. Baldwin		Aug. 18, 80	
METHOD: Smooth Drafting				CONTOURS BY		N/A	
CHECKED BY				N/A			
SCALE: 1:20,000 HYDRO SUPPORT DATA BY				N/A			
CHECKED BY				N/A			
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				Field Edit Canceled			
CHECKED BY				" " "			
6. APPLICATION OF FIELD EDIT DATA CHECKED BY				N/A			
7. COMPILATION SECTION REVIEW BY				Gregory L. Fromm		Sept. 1980	
8. FINAL REVIEW BY				Robert Rodkey, Jr.		Apr. 1981	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				" " "		June 1981	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				Gregory Fromm		Oct. 1981	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				H. D. Wolfe		MAR 1982	

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

COMPILATION SOURCES

TP-01058

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8(E) Focal Length=152.71 mm		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE Pacific	
☐ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☒ TIDE CONTROLLED PHOTOGRAPHY				☒ STANDARD ☐ DAYLIGHT	
				MERIDIAN 120th	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
79E(P) 5531-5534	4/28/79		1:60,000	N/A	
5564-5569	4/28/79		1:60,000		
79E(C) 4962-4972	4/1/79		1:20,000		
4993-5000	4/1/79		1:20,000		
4947-4948	4/1/79		1:20,000	See the following Form 76-36 B1 for Tidal Information	
79E(I) 5422R-5425R	4/7/79	1036-1037	1:50,000		
5431R-5435R	4/7/79	1047-1052	1:50,000		
5515R-5518R	4/28/79	1524-1526	1:50,000		
5086R-5089R	4/1/79	1205-1206	1:50,000		
5108R-5111R	4/1/79	1235-1236	1:50,000		
5096R-5098R	4/1/79	1218-1219	1:50,000		

REMARKS The panchromatic and infrared photographs were ratioed for use in graphic compilation to supplement the base compilation.

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the mean high water line is the infrared photography listed under Item 1. of this page. Refer to paragraph #35 of the Compilation Report bound with this Descriptive Report.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

The source of the mean low low water line is the infrared photography listed under Item 1 of this page. Refer to paragraph #35 of the Compilation Report bound with this Descriptive Report.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-01053	TP-01059	No Contemporary Survey	TP-01057

REMARKS

NOAA FORM 76-36B(1)
(7-75)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE - COORDINATED PHOTOGRAPHY

TP - 01058

LOCATION AND PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)	STAGE OF TIDE	MEAN RANGE
North shore of Grizzly Bay to Roe Island 79E(I) 5422R-5425R	* Port Chicago (941-5144)	(In Feet) 0.0 MHW	(In Feet) Not available
Montezuma Slough to Suisan Bay 79E(I) 5515R-5518R	* Montezuma Bridge (941-5402)	-0.50 MHW	Not available
North and south shoreline of Suisan and Honker Bays from Roe Island to Browns Island 79E(I) 5431R-5435R	* Port Chicago (941-5144)	0.0 MHW	Not available
North shore of Grizzly Bay to Roe Island 79E(I) 5086R-5089R	* Port Chicago (941-5144)	-0.05 MLLW	Not available
Montezuma Slough to Suisan Bay 79E(I) 5096R-5098R	* Montezuma Bridge (941-5402)	-0.09 MLLW	Not available
North and south shoreline of Suisan and Honker Bays from Roe Island to Browns Island 79E(I) 5108R-5111R	* Port Chicago (941-5144)	+0.06 MHW	Not available

REMARKS: * Tide stations in operation at the time of photography are temporary or subordinate stations.

Tidal information was furnished by the Tides and Water Level Division (C23) and the Surveys Planning Branch (C344).

HISTORY OF FIELD OPERATIONS

TP-01058

I. ☒ FIELD INSPECTION OPERATION ☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	Robert B. Melby	May 1979
2. HORIZONTAL CONTROL	RECOVERED BY N/A ESTABLISHED BY N/A PRE-MARKED OR IDENTIFIED BY N/A	
3. VERTICAL CONTROL	RECOVERED BY N/A ESTABLISHED BY N/A PRE-MARKED OR IDENTIFIED BY N/A	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY N/A LOCATED (Field Methods) BY Robert B. Melby IDENTIFIED BY N/A	March 1979
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY BY ☒ NO INVESTIGATION	N/A
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY N/A	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N/A	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

None

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☐ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

NOAA Form 76-77 (3 books), NOAA Form 77-53 (2 books)

NOAA Form 76-53 (6 cards), NOAA Form 75-82A (9)

RECORD OF SURVEY USE

TP-01058

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline Map	OCT 1980	Class III Shoreline Map, Field Edit canceled		
Final Review	Apr. 1981	Class III map Field Edit Canceled	Oct. 15, 1981	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
 2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:
 4. ☒ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: 10/30/81

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

TP-01053, TP-01057, TP-01058, TP-01059

These maps cover the shoreline area east of San Pablo Bay, California and includes Suisan Bay from Carquinez Strait eastward to the Sacramento and San Joaquin Rivers.

The purpose of the job is to provide support for future hydrographic survey operations and chart maintenance.

Field operations, which began in February 1979, generally consisted of the premarking, recovery, and identification of horizontal control necessary for the aerotriangulation process.

Aerotriangulation photography was furnished at 1:60,000 scale from panchromatic film taken in May 1979 with the RC-8 (E) camera. Tide coordinated black-and-white infrared photography was taken in April 1979 with the RC-8(E) camera at 1:50,000 scale. Supplemental natural color photography was flown in April 1979 at 1:20,000 scale using the RC-8 (E) camera.

Three strips of 1:60,000 scale panchromatic photography were bridged by analytic aerotriangulation methods. The tide-coordinated black-and-white infrared photography was ratioed from the bridging photography to ensure proper scale for compiling.

Compilation of the map was accomplished through graphic and instrument techniques. All cultural features as well as image points for controlling the ratioed tide-coordinated black-and-white infrared photography were compiled on the Wild B-8/CAP System utilizing the 1:60,000 scale bridged panchromatic photography. The mean high water and mean lower low water lines were compiled graphically utilizing the appropriate ratioed tide-coordinated black-and-white infrared photography.

All map line work is smooth compilation drafting.

Field Edit operations were canceled by memo in June 1981.

Final review of the map was performed by Quality Control, Photogrammetric Branch, Rockville, Maryland. The map is registered as a Class III map.

This map complies with the project instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

This Descriptive Report contains all pertinent reports and listings of all data used to the completion of this map.

This Job CM-7823 was planned to provide twenty 1:20,000 scale maps. Part I of CM-7823 comprises four maps; TP-01053, TP-01057, TP-01058, and TP-01059 at 1:20,000 scale. Photography to complete Part I was taken in 1979.

Compilation photography to complete the remainder of job CM-7823, or part of, is scheduled to be taken in FY 1982. Subsequent instructions will be issued at this time.

Duplicate bridging contacts and film positives of strips 1, 2, and 3 covering the junctions of TP-01053 to TP-01054 and TP-01059 to TP-01060 were ordered. Bridged points were transferred from the original to the duplicate film copies, using the PUG point transfer device. This will provide horizontal control tie between the above maps when the remainder of this job or parts of is scheduled for mapping.

Bridging photography used for completing Part I will be forwarded along with other data to the Federal Records Center. The remaining bridging photography and a horizontal position listing of the transferred points will be held in the Quality Control Group, OA/C3421 and used to complete future photogrammetric mapping operations of Job CM-7823.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Pacific Marine Center
1801 Fairview Avenue East
Seattle, WA 98102

09

May 24, 1979

Field Operations Report:

Projects CM-7704: San Pablo Bay, California
CM-7823: Sacramento and San Joaquin Rivers, California

These two projects are a combined photo-field operation that commenced with on site field activities, beginning on the 28th of February 1979.

Project CM-7823 required the photo-paneling of pre-selected horizontal control stations prior to the flying of the aerial photography. All panels were in place and ready for photography by the designated date.

Project CM-7704 did not require photo-paneling of the horizontal control as this had been accomplished during the 1977 field season.

Both projects required tide-controlled photography.

Horizontal Control:

The designated, existing horizontal control was paneled in accordance with the project instructions, except one station that was destroyed. It was replaced with station GOODYEAR 2 and paneled.

A number of the offshore aids to navigation were positioned by triangulation intersection station methods. The location of these aids was not required by the project instructions. Some of the aids are charted as "PA" positions and others were used by a PMC vessel engaged in hydrographic surveys as electronic control or calibration sites. Future hydrographic surveys will no doubt utilize other stations as located for the same purpose.

Tide-Coordinated Photography:

Tide-coordinated photography was flown on both projects by the NOS Air Photo Mission.

Personnel of the NOS California Tides Party manned the tide stations in the San Pablo Bay area. PMC Photo Party personnel manned the tide stations in the Suisun Bay area. The tide staffs were monitored at 15-minute intervals and relayed by radio to the Air Photo Mission when requested.



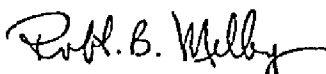
Existing tide staffs were used and were releveled after the final tide-coordinated photography was flown.

During several of the tide-controlled flights on the weekends, the staffs were not manned. However, recording tide gages were in operation at several sites and the required tidal data should be available from the Tides Section in Rockville, MD.

Inclement weather, not conducive to aerial photography, was a factor in prolonging the field project. The automobile gasoline shortage was noticeable, but it did not adversely affect or hamper the field operations.

All photo-panels were removed after the aerial bridging photography was flown, except station DEL GRANDE 1954. This panel was removed by a weed-control crew on 4/18/79, according to a nearby property owner. Its image should appear on the first-attempted bridging flight.

Respectfully submitted,



Robert B. Melby
Chief, PMC Photo Party, CPM133

Photogrammetric Plot Report
Sacramento and San Joaquin Rivers California - CM-7823
May 5, 1980

21. Area Covered

The area covered by this report extends from the Sacramento River at San Pablo Bay eastward to the San Joaquin River. The area is covered by four 1:20,000 scale sheets; TP-01053 and TP-01057 through TP-01059. The 4 sheets required for this project are part of a major project area consisting of an additional 10 sheets; TP-01051, TP-01052, TP-01054 through TP-01056, and TP-01060 through TP-01064.

The additional 10 sheets have not yet been assigned to our section.

22. Method

Three strips of 1:60,000 scale black-and-white photography were bridged by analytic aerotriangulation methods. The center strip was controlled by field identified control. The 2 side flight lines were controlled entirely by tie points. The tide controlled photography was ratioed from the bridging photography to ensure proper scale for compiling.

23. Adequacy of Control

Control checked well within map accuracy standards and is more than sufficient for its intended use. See attached sheet for accuracy of control in the strip adjustment.

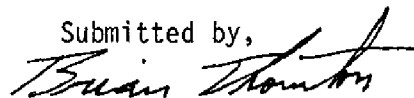
24. Supplemental Data

USGS quadrangles were used to provide vertical control for the adjustment.

25. Photography

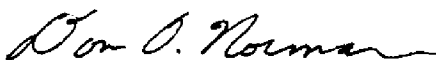
The coverage, overlap, and quality of the photography was adequate for the job.

Submitted by,



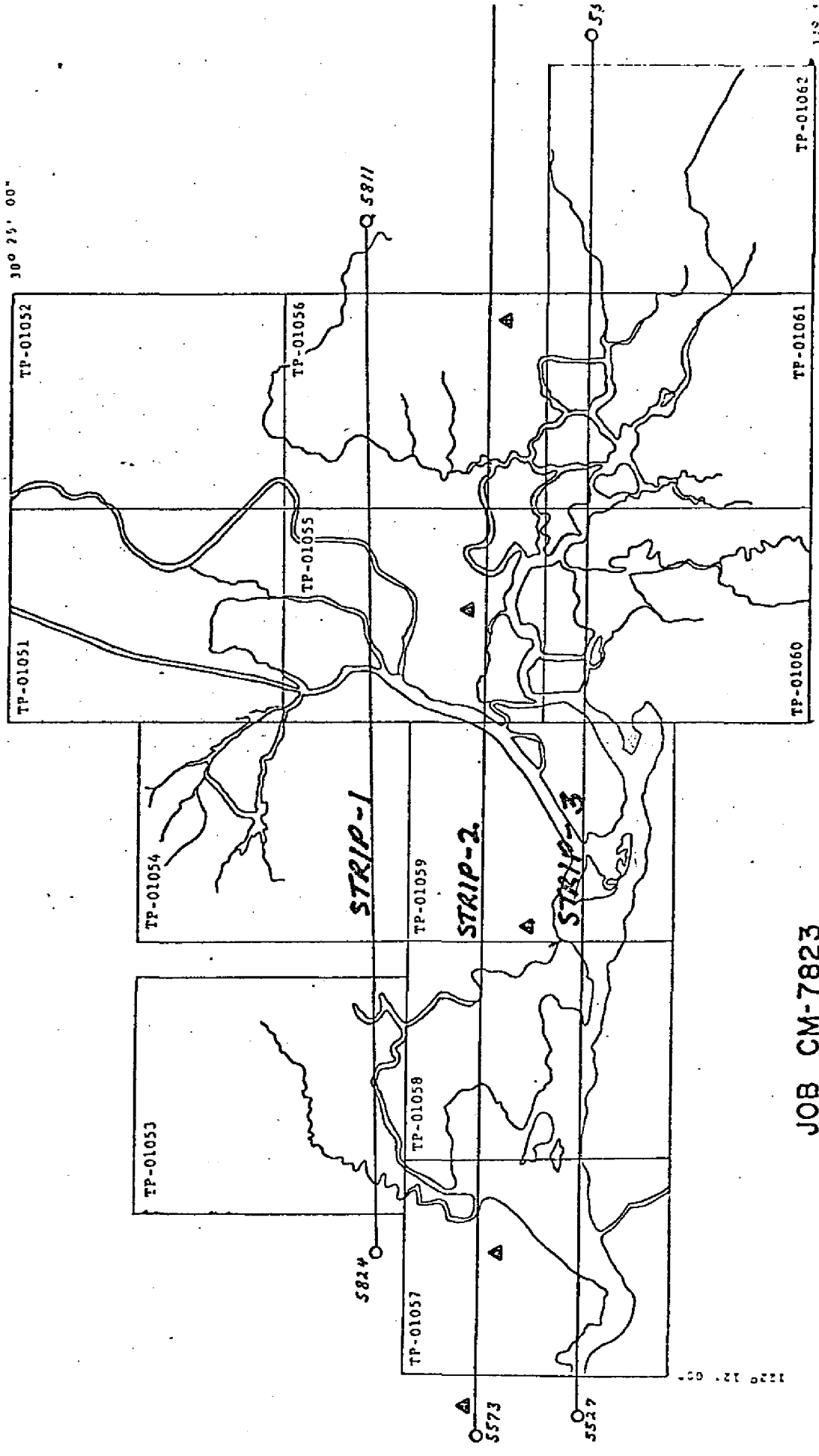
Brian Thornton

Approved and Forwarded:



Don O. Norman
Chief, Aerotriangulation Section

30° 25' 00"



JOB CM-7823

SACRAMENTO AND SAN JOAQUIN RIVERS
CALIFORNIA
SHORELINE MAPPING - SCALE 1:20,000

o 79EP 1:60000 bridging photography

30° 25' 00"

TP-01051

TP-01052

TP-01053

TP-01054

TP-01056

TP-01055

TP-01057

TP-01058

TP-01059

JOB CM-7823

SACRAMENTO AND SAN JOAQUIN RIVERS
CALIFORNIA

SHORELINE MAPPING - SCALE 1:20,000

□ 79ER 1:50000 MLW

TIDE GAGES

- 1 - Crockett
- 2 - Port Chicago
- 3 - Montezuma Bridge
- 4 - Collinsville

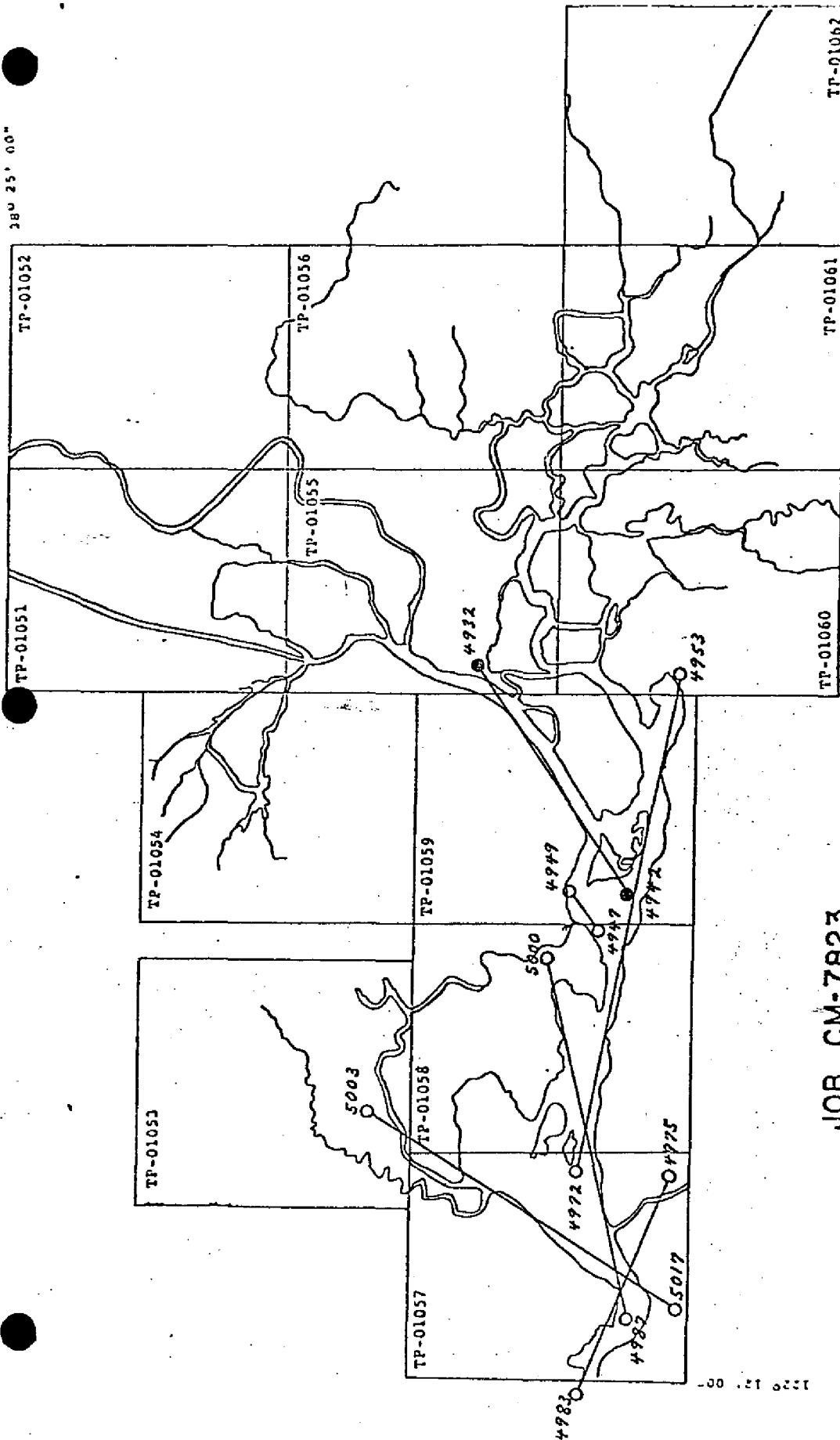
TP-01062

TP-01061

TP-01060

37°

38° 25' 00"



JOB CM-7823

SACRAMENTO AND SAN JOAQUIN RIVERS
CALIFORNIA

SHORELINE MAPPING - SCALE 1:20,000

o 79EC 1:20000

37° 55'

Accuracy of Control

Pt. #	X-Error	Y-Error
552101	0.253	-0.248
556101	-0.722	0.940
560101	0.388	-0.648
564100	0.880	-1.232
570101	-1.071	2.540
572101	0.146	-1.337

CM 7823
SACRAMENTO RIVER, CALIF.

LISTING OF RATIO VALUES

EXPOSURES

RATIO

79-EP-5527 thru 5537	2.954X
5561 thru 5573	2.959X
5820 thru 5824	3.079X

EXPOSURES

R A T I O

79-ER-5077 thru 5082	2.513X
5085 thru 5090	2.510X
5094 thru 5099	2.517X
5102 thru 5113	2.503X
5420 thru 5427	2.549X
5430 thru 5439	2.537X
5442 thru 5450	2.542X
5485 thru 5487	2.468X
5513 thru 5518	2.446X

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	STATION NAME	JOB NO.	GEODEIC DATUM		AEROTRI- ANGULATION POINT NUMBER	SOURCE OF INFORMATION (Index)	COORDINATES IN FEET		GEOGRAPHIC POSITION		ORIGINATING ACTIVITY	REMARKS
			STATE	ZONE			φ LATITUDE	λ LONGITUDE				
TP-01058		CM-7823									Special Projects Section (Rockville)	
	MIDDLE PT LT, 1979 (Field Position)	PMC List			PMC I.D.		X=	φ 38-03-17.920				
		Comp.			423		Y=	λ 121-59-28.929				
	SUISUN BAY CHAN LT 21, 1979 (Field Position)	"			425		X=	φ 38-03-38.122				
							Y=	λ 121-58-55.827				
	SUISUN BAY CHAN						X=	φ 38-03-32.169				
	LT 22, 1979 (Field Position)	"			426		Y=	λ 121-58-42.457				
	SUISUN BAY CHAN						X=	φ 38-03-35.304				
	LT 25, 1979 (Field Position)	"			427		Y=	λ 121-57-56.981				
	SUISUN BAY CHAN						X=	φ 38-03-28.635				
	LT 24 1979 (Field Position)	"			428		Y=	λ 121-58-00.886				
	PITTSBURG STOCKTON FIREBRICK CO WATER TANK 1932	381213					X=	φ 38-01-31.81			Recovered 1977	
		Sta 1170			138		Y=	λ 121-54-30.84				
	PITTSBURG SHELL CHEM CO WATER TANK 1932	381213					X=	φ 38-01-41.50			Recovered 1979	
		Sta 1169			139		Y=	λ 121-56-37.72				
	NICHOLS ALLIED CHEM TANK 1932	Listing from Marine Ch. Division					X=	φ 38-02-45.10				
							Y=	λ 121-59-10.88				
	PITTSBURG JOHNS MANVILLE CO WATER TANK 1932	381213			141		X=	φ 38-01-48.442				
		Sta 1165			534401		Y=	λ 121-52-40.467				
							X=	φ				
							Y=	λ				
COMPUTED BY							COMPUTATION CHECKED BY				DATE	
LISTED BY							LISTING CHECKED BY		Wm. Maynard		DATE	6-23-80
HAND PLOTTING BY							HAND PLOTTING CHECKED BY				DATE	

Compilation Report

TP-01058

31. Delineation

Compilation of this map was accomplished through graphic and instrument techniques. All cultural features as well as image points for controlling the infrared photography were compiled on the Wild B-8/CAP System utilizing the panchromatic photography. The mean high water and mean lower low water lines were compiled graphically utilizing the appropriate tide-coordinated infrared photography.

32. Control

Refer to the Photogrammetric Plot Report bound with this Descriptive Report.

The identification, density, and placement of horizontal and vertical control was adequate.

33. Supplemental Data

Tidal information was furnished by the Tides and Water Level Division (C23) and the Surveys Planning Branch (C344).

34. Contours and Drainage

All drainage is from office interpretation of panchromatic photography, supplemented by the infrared photography.

No contours were compiled on this manuscript.

A comparison of drainage features was made to those depicted on existing nautical charts and quads. No significant changes could be noted. In lieu of portraying all canals and drainage ditches, dikes and roads on dikes were delineated because of the density of detail. This was done to provide control for possible future surveys.

35. Shoreline and Alongshore Details

There was no preliminary field inspection of the shoreline.

The mean high and mean lower low water lines were compiled by office interpretation of tide-coordinated infrared photography.

Alongshore and foreshore features were compiled by office interpretation of panchromatic photography, supplemented by natural color photography where coverage was available.

36. Offshore Detail

No unusual problems were encountered in compiling details offshore.

37. Landmarks and Aids

Refer to Forms 76-40 bound with this Descriptive Report for the description and geographic positions of those landmarks and aids that fall within the geographic limits of this map.

Forms 76-40 were submitted to the Marine Chart Division (C32) by Photo Party CPM 133 on May 23, 1979, under CM-7823. The positions furnished are field positions.

The natural color photography was used to supplement the panchromatic photography in the identification of fixed aids and landmarks.

38. Control for Future Surveys - Inapplicable

39. Junctions

Refer to Form 76-36B, Item 5 of this Descriptive Report.

40. Horizontal and Vertical Accuracy

This map complies with the National Standards of Map Accuracy.

41. thru 45. - Inapplicable

46. Comparison with Existing Maps

A comparison was made with the following USGS quadrangles:

Antioch North, Calif., 1:24,000 scale, 1978

Denverton, Calif., 1:24,000 scale, 1953, photorevised in 1968, 1973.

Honker Bay, Calif., 1:24,000 scale, 1953, photorevised in 1968, 1973.

Fairfield South, Calif., 1:24,000 scale, 1949, photorevised in 1968.

Port Chicago, Calif., 1:24,000 scale, 1959, photorevised in 1968.

No significant differences were noted.

47. Comparison with Nautical Charts

A comparison was made with the following charts:

18658, Suisan Bay - Roe Island and vicinity, 1:10,000 scale
20th Edition, March 24, 1979

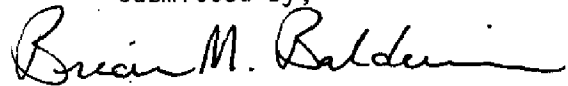
18656, Suisan Bay, 1:40,000 scale, 41st Edition, January 6, 1979

18652, San Francisco to Antioch, Pages D and E, 1:40,000 scale,
17th Edition, April 1978

Items to be applied to Nautical Charts immediately - None

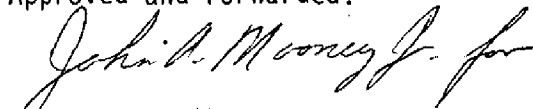
Items to be carried forward - None

Submitted by,



Brian M. Baldwin

Approved and Forwarded:



George M. Ball
Chief, Special Projects Section

Review Report
TP-01058
Shoreline (Photogrammetric)
March 1981

61. General Statement

Refer to "Summary to Accompany Descriptive Report" for general information in regards to the completion of this map.

62. Comparison with Registered Topographic Surveys

The geographic area covered by this map was mapped in 1941 at a scale of 1:10,000. Since nearly forty (40) years have lapsed, no comparison between this map and those prior surveys were made.

63. Comparison with Maps of Other Agencies

Refer to the Compilation Report, Item 46, for information on this subject.

64. Comparison with Contemporary Hydrographic Surveys

There is no contemporary hydrographic survey for the geographic area covered by this map. Prior surveys were completed in 1941 and 1942 therefore, a comparison was not made.

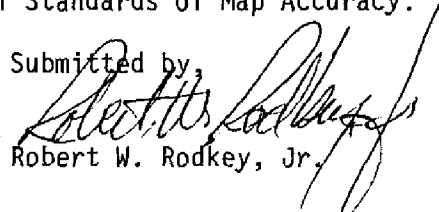
65. Comparison with Nautical Charts

Refer to the Compilation Report, Item 47, for information of this subject.

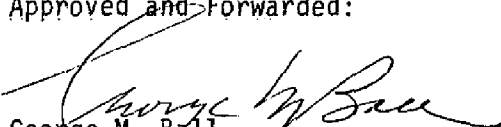
66. Adequacy of Results and Future Surveys

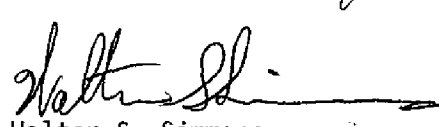
This map complies with the project instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted by,


Robert W. Rodkey, Jr.

Approved and Forwarded:


George M. Ball
Chief, Photogrammetric Branch


Walter S. Simmons
Chief, Photogrammetry Division

9/15/80

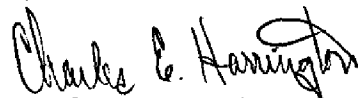
GEOGRAPHIC NAMES
FINAL NAME SHEET
CM-7823 (Sacramento River, California)

TP-01058

Atchison Topeka and Santa Fe (RW)
Browns Island
Champion Slough
Chipps
Chipps Island
Dutton
Dutton Island
Freeman Island
Gillespie Point
Grizzly Bay
Grizzly Island
Hammond Island
Honker Bay
Mallard Island
Mallard Slough
Middle Ground Island
Middle Point
Montezuma Slough
New York Point
New York Slough
Pelican Point
Pittsburg

Point Buckler
Point Emmet
Point Palo Alto
Point Wall
Point Wise
Ryer Island
Sacramento Northern (RW)
Shore Acres
Simmons Island
Simmons Point
Snag Island
Southern Pacific (RR)
Spinner Island
Spoonbill
Spoonbill Creek
Stake Point
Suisun Bay
Suisun Cutoff
Van Sickle Island
West Pittsburg
Wheeler Island

Approved by:



Charles E. Harrington
Chief Geographer, C3x5

PHOTOGRAMMETRIC BRANCH
PHOTOGRAMMETRY DIVISION

SVY	TP-01058	*	* RPT UNIT	S.P.S.,ROCKVILLE,M.D.*	PAGE 1 OF 6	**
JOB	CM-7823	*	* STATE	CALIFORNIA	*	**
PRJ	SACRA R.	*	* LOCALITY	SUISAN BAY	*ORIGINATING ACTIVITY	**
DTM	NA 1927	*	* DATE	9/10/80	* COMPILATION	**

```
* * POSITIONS DETERMINED *
* * AND/OR VERIFIED BY *
* * FIELD AND OFFICE *
* * ACTIVITIES *
* * NO FIELD EDIT-CLASS III MAP *
* * B. BALDWIN *
* * B. MAYNARD *
* * B. MAYNARD *
* * FIELD REPRESENTATIVE *
* * OFFICE COMPILER *
* * DIGITIZER *
* * DATA PROCESSER *
```

KEY FOR ENTRIES UNDER METHOD AND DATE OF LOCATION

OFFICE * FIELD(CONT,D) **
1.OFFICE IDENTIFIED AND LOCATED OBJECTS. * B.PHOTOGRAMMETRIC FIELD POSITIONS** SHOW
THE NUMBER AND DATE (INCLUDING MONTH,DAY * THE METHOD OF LOCATION OR VERIFICATION.
AND YEAR) OF THE PHOTOGRAPH USED TO * DATE OF FIELD WORK AND NUMBER OF PHOTO-
IDENTIFY AND LOCATE THE OBJECT ARE SHOWN. * GRAPH USED TO LOCATE AND IDENTIFY THE
EXAMPLE 75E(C)6042 * OBJECT.
9-12-77 * EXAMPLE P-8-V

FIELD

[illegible]

```
* **FIELD POSITIONS ARE DETERMINED BY FIELD **
* OBSERVATIONS BASED ENTIRELY UPON GROUND **
* SURVEY METHODS **
```

NOTE: WHERE THE NAME OF AN AID INCLUDES THE IMMEDIATE GEOGRAPHIC HEADING UNDFR WHICH IT IS LISTED A DASH (-) IS USED TO INDICATE THE GEOGRAPHIC HEADING WHICH IS PART OF THE OFFICIAL NAME.

76-40 PHOTOGRAMMETRIC BRANCH NATIONAL OCEAN SURVEY NOAA
 LISTING PHOTOGRAMMETRY DIVISION DEPARTMENT OF COMMERCE USA
 DATATAB VERSION 782707

[illegible]

* CHARTING*	* DESCRIPTION	* POSITION	* CMD *	* METHOD AND DATE	* CHARTS
NAME *	RECORD REASON FOR DELETION	LATITUDE DM	ALTEK*	OF LOCATION	
	PUT TRIANGULATION NAMES IN () *	LONGITUDE DP	DGTZD*	OFFICE *	FIELD *AFFECTED*
THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS					

* * *	SUISUN BAY	* * *	* * *
* * *	FISHERMAN CHANNEL	* * *	* * *

-DYN	*	*	00 00 00.00	.0	NOT *UNVERIFIED*	*	18656	*
1	*	*	00 00 00.00	.0	DGTZD*	*	18658	*

* -OYBN	*	* 00 00 00.00	* 0 NOT *UNVERIFIED*	* *	* DITTO *
2	*	* 00 00 00.00	* 0 DGTZD*	* *	

-DYNB	*	*	00	00	00.00	.0	NOT *UNVERIFIED*	*	DITTO	*
3	*	*	*	00	00 00.00	.0	OGT2D*	*		*

-DYBN	*					* 00 00 00.00	.0 NOT *UNVERIFIED*	*	DITTO
4	*					* 00 00 00.00	.0 DGTZD*	*	

-DYNB	*									* 00 00 00.00	.0 NOT *UNVERIFIED*				*	DITTO	*
6	*									* 00 00 00.00	.0 DGTZD*				*		*

[illegible][illegible]

LT	*	-PIER 2 WEST END LIGHT				* 00 00 00.00	.0 NOT *UNVERIFIED*	** 18656 *
	*					* 00 00 00.00	.0 DGTZD*	** 18658 *

LT 17	*	-CHANNEL LIGHT 17	*	38 03 47.07	1451.3	*79E(C)4994*	*	D110	*
	*		*	122 01 09.21	224.5	* 04/01/79 *	*	25	*

DATA TAB
VERSION
782707

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

PHOTOGRAMMETRIC BRANCH
PHOTOGRAMMETRY DIVISION

76-404
LISTING

* SVY	TP-01058	*	NONFLOATING AIDS FOR CHARTS	* RPT UNIT	S.P.S., ROCKVILLE, MD.	* PAGE 3 OF 6
* JOB	CM-7823	*	TO BE REVISED	* STATE	CALIFORNIA	*
* PRJ	SACRA R.	*		* LOCALITY	SUISAN BAY	* ORIGINATING ACTIVITY*
* DTW	NA 1927	*		* DATE	9/10/80	* COMPILATION *

*** THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS ***

NAME	DESCRIPTION	RECORD REASON FOR DELETION	POSITION	CMD	METHOD AND DATE	AFFECTED*
			LATITUDE	ALTEK*	OF LOCATION	
			LONGITUDE	DGTZD*	OFFICE	FIELD
* CHARTING*						
* NAME	PUT TRIANGULATION NAMES IN ()					

* * LT 19 * -CHANNEL LIGHT 19	* 38 03 38.86	1198.1	* 79E(P)5531*	* 18656 *
* * * *	* 122 00 04.69	114.3	* 04/28/79 *	* 18658 *

[illegible][illegible]

* * -CHAN	* 38 03	* 79E(P)5532*	* *
* * LT 20	* 121 59	* 04/28/79 *	* DITTO *
		1028.9	
		495.6	

* -CHAN	* (SUISUN BAY CHAN LT 21 1979)	* 38 03 38.12	1175.3	NOT	*79E(P)5532*	* *	DITTO	* *
* LT 21	* FIELD POSITION	* 121 58 55.83	1361.0	DGTZD*	04/28/79	* *		

** -CHAN	*	(SUITSUN BAY CHAN	LT 22	1979)	*	38	03	32.17	991.9	NOT	*79E(P)5532*	*	DITTO	*
** LT 22	*	* FIELD POSITION			*	121	58	42.46	1035.1	DGTZD*	04/28/79	*		*

* * -CHAN	* (SUISUN BAY CHAN	LT 24 1979)	* 38 03 28.64	883.0	NOT *79E(P)5532*	* *
* * LT 24	* FIELD POSITION		* 121 58 00.89	21.7	DGTZD* 04/28/79 *	* 18656 *

**	-CHAN	**	(SUISUN BAY CHAN	LT 25	1979)	**	38	03	35.30	1088.4	NOT	*79E(P)	5532*	**	DITTO	**
**	LT 25	**	FIELD POSITION			**	121	57	56.98	1389.1	DGTZD*	04/28/79	*	**		**

[illegible]

**	-CHAN	*		*	38	03	08.45	260.5	*79E(P)5533*	**	BIII0	**
**	LT 27	*		*	121	55	54.37	1325.6	* 04/28/79 *	*		**

26

* * SVY 7P-01058 * RPT UNIT S.P.S., ROCKVILLE, MD. * PAGE 4 OF 6 * *											
* * JOB CM-7823 * NONFLOATING AIDS FOR CHARTS * STATE CALIFORNIA * *GRIGINATING ACTIVITY* * *											
* * PRJ SACRA R. * TO BE REVISED * LOCALITY SUISAN BAY * *COMPILATION * *											
* * DTM NA 1927 * * DATE 9/10/80 * *											
* * THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS * *											
* *											

76-40
LISTING

.....

* SVY	7P-01058	*	RPT UNIT	S.P.S., ROCKVILLE, MD.	*	PAGE	6 OF	6	*
* JOB	CM-7823	*	STATE	CALIFORNIA	*				*
* PRJ	SACRA R.	*	LOCALITY	SUISAN BAY	*				*
* DTM	NA 1927	*	DATE	9/10/80	*				*
* THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS *									
* CHARTING* RECORD REASON FOR DELETION * POSITION CMD * METHOD AND DATE * CHARTS *									
* NAME * PUT TRIANGULATION NAMES IN () * LONGITUDE DP DGTZD* OFFICE * FIELD *AFFECTED*									
* TANK * (PITTSBURG STOCKTON FIREBRICK * 38 01 31.81 980.8 NOT *79E(P)5533* * 18656 *									
* CO WATER TANK 1932) * 121 54 30.84 752.2 DGTZD* 04/28/79 * * 18659 *									
* TANK * 38 01 36.89 1137.4 NOT *79E(P)5533* * 18656 *									
* 121 53 59.14 1442.4 DGTZD* 04/28/79 * * * *									
* TANK * (PITTSBURG JOHNS MANVILLE CO * 38 01 48.44 1493.5 NOT *79E(P)5533* * 18656 *									
* WATER TANK 1932) * 121 52 40.47 987.0 DGTZD* 04/28/79 * * 18659 *									
* STACK * 38 02 21.04 648.7 NOT *79E(P)5533* * 18656 *									
* 121 53 42.50 1036.4 DGTZD* 04/28/79 * * * *									
* STACK * TALLEST EAST STACK * 38 02 24.62 759.1 *79E(P)5533* * 18656 *									
* 121 53 36.09 880.1 * 04/28/79 * * 18659 *									
* STACK * TALLEST WEST STACK * 38 02 24.94 768.9 *79E(P)5533* * DITTO *									
* 121 53 37.59 916.6 * 04/28/79 * * * *									
* TANK * (NICHOLS ALLIED CHEM * 38 02 45.10 1390.5 NOT *79E(P)5532* * 18656 *									
* TANK 1932) * 121 59 10.88 265.3 DGTZD* 04/28/79 * * 18658 *									
* TRIPOD * 38 03 47.30 1458.4 *79E(P)5532* * DITTO *									
* 121 58 46.24 1127.2 * 04/28/79 * * * *									
* TRIPOD * 38 04 04.66 143.7 *79E(P)5531* * DITTO *									
* 122 01 37.58 916.0 * 04/28/79 * * * *									
* TOWER * 38 02 57.67 1778.1 *79E(P)5532* * 18656 *									
* 121 57 20.71 505.0 * 04/28/79 * * * *									

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. TP-01058

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]